

DATASHEET

FELIS SZK-C-4W24 | Flexible Self-Adhesive Antenna | WI-FI / Bluetooth

Features:

WI-FI /Bluetooth : 2400-2500MHz

3.50dBi Peak Gain, >70% Efficiency

Dimensions: 22.0 x 6.0 x 0.2 mm

Cable Length: 100mm, 0.81mm Ø

Connector: MHF2 (U.FL Compatible)

RoHs compliant

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Introduction

FELIS (SZK-C-4W24) from Synzen is a versatile and compact antenna designed specifically for Wi-Fi and Bluetooth applications operating within the 2.4 to 2.5GHz frequency range. Ideal for modern wireless connectivity solutions, the FELIS antenna provides consistent, high-performance communication across a variety of devices, including smart home technology, IoT applications, and consumer electronics.

With a sleek and compact design, the FELIS antenna measures 22mm x 6.0mm x 0.2mm, making it perfectly suited for space-limited devices. The flexible material and double-sided adhesive backing ensure easy “peel-and-stick” installation, enabling simple and effective integration into device enclosures.

FELIS is optimized to deliver superior signal strength and stability, even in constrained environments, making it an ideal choice for devices requiring reliable wireless performance. Its compact form factor and precise tuning ensure optimal connectivity in both free-space and embedded environments.

Focused on the 2.4GHz range, the FELIS antenna is engineered to deliver peak performance for Wi-Fi and Bluetooth applications, minimizing interference and maximizing data transmission for a smooth, seamless wireless experience.

Synzen offers comprehensive testing and support to ensure that the FELIS antenna meets the specific requirements of your application. Whether used in smart devices, wearables, or other wireless-enabled products, FELIS delivers robust connectivity, easy installation, and reliable performance, making it a perfect fit for next-generation technology.



Mechanical Specifications

Parameter	
Part Number	SZK-C-4W24
Name	FELIS
Dimensions (mm)	22.0 x 6.0 x 0.2
Weight	<1.5g
Antenna Type	FPC + Cable
Cable Length (mm)	100.0, 0.81 \varnothing *
Connector	MHF2 (U. FL Compatible) *
Part Number with Cable and Connector	SZK-C-4W24-100-02
Adhesive backing	3M 468

*Alternate cable length and connectors available upon request

Electrical / RF Specifications

Band	Frequency Range (MHz)	Efficiency (%)	Peak Gain (dBi)	VSWR	Impedance
Wi-Fi 2GHz	2400-2500	>70	4.80	1.70:1	50 Ω

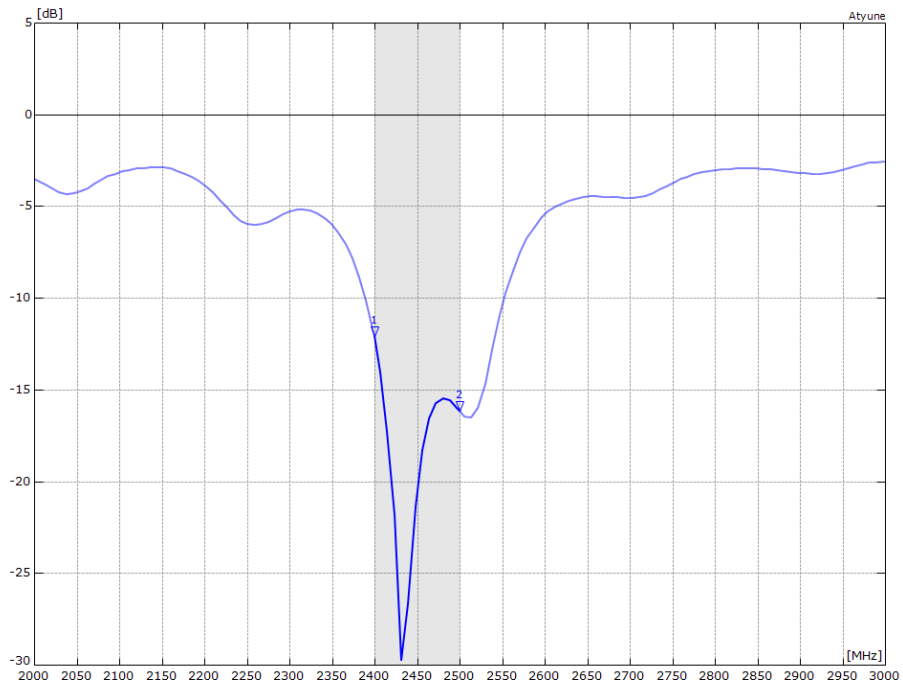
Note: The antenna performance was measured on a 2mm thick ABS plastic sheet

Environmental

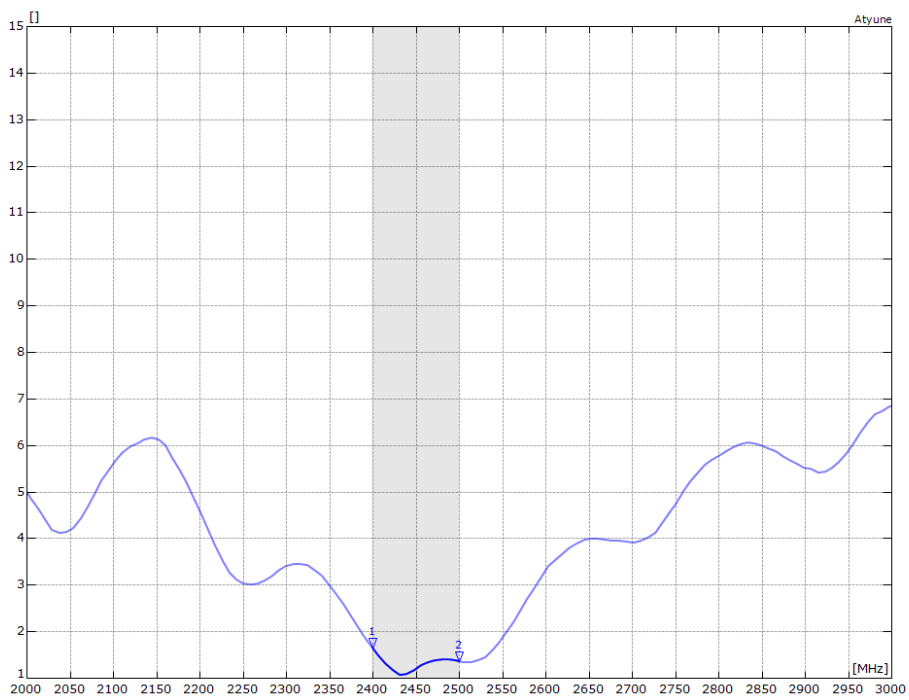
Parameter	
Operational Temperature	-40 to +85
Storage Temperature	-40 to +85
Relative Humidity (Storage)	65 \pm 20% RH
Moisture Sensitivity	1
RoHs and REACH compliant	Yes

RF Characteristics

Return loss

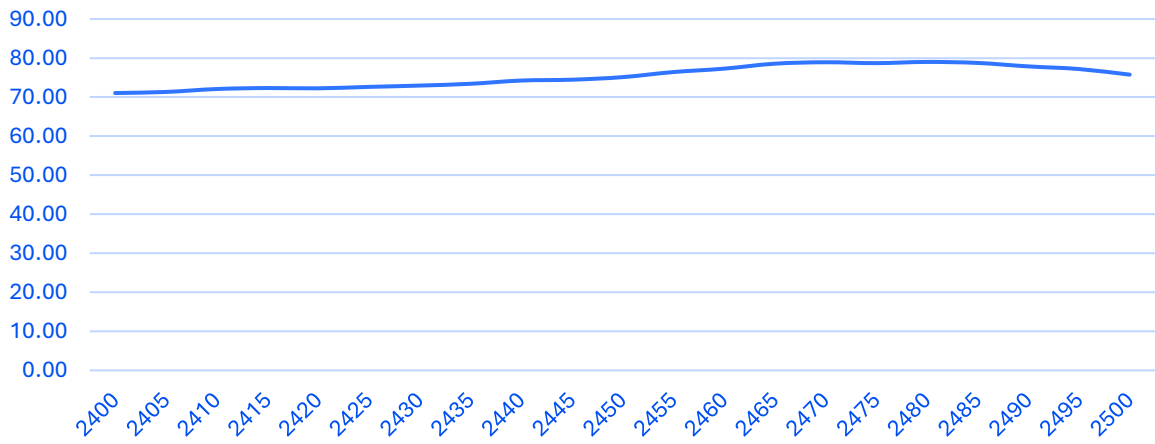


VSWR

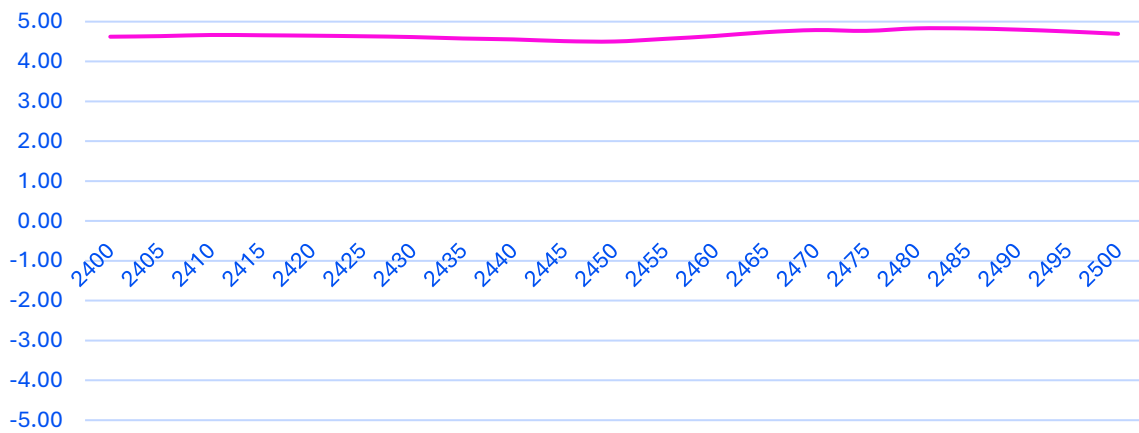


V

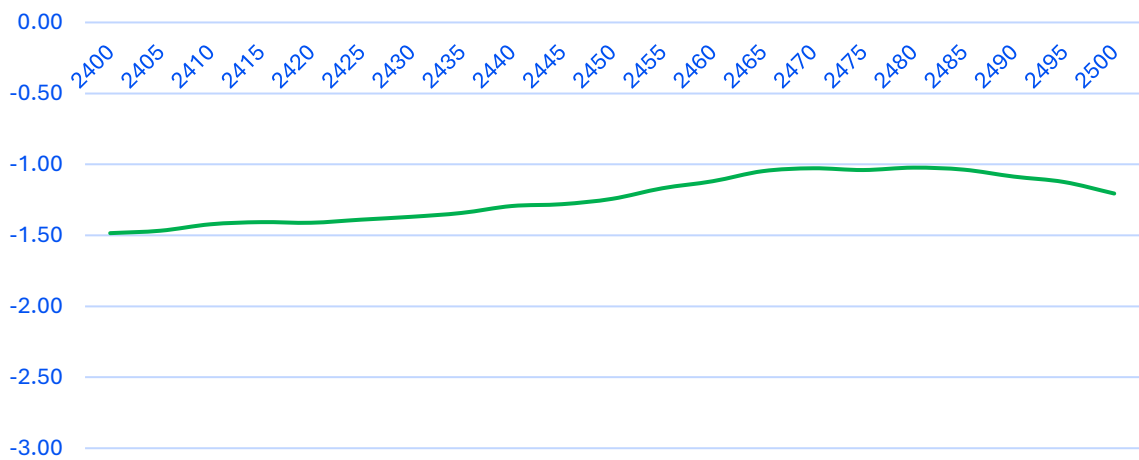
Efficiency



Peak Gain

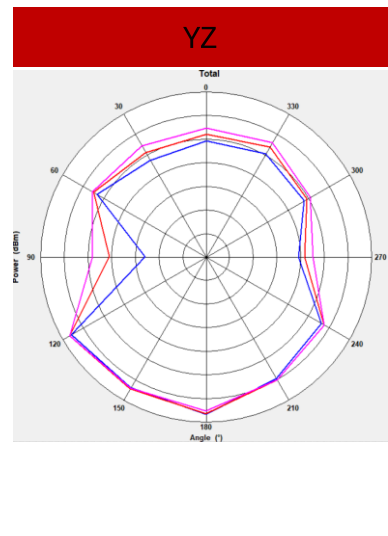
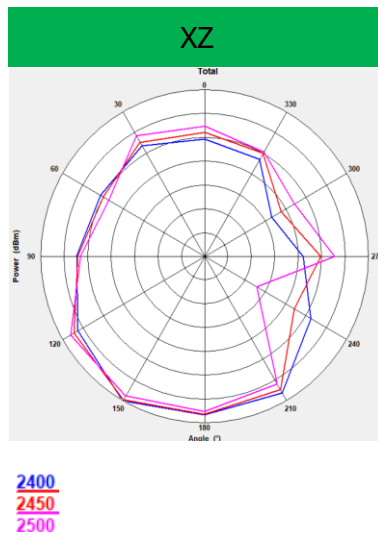
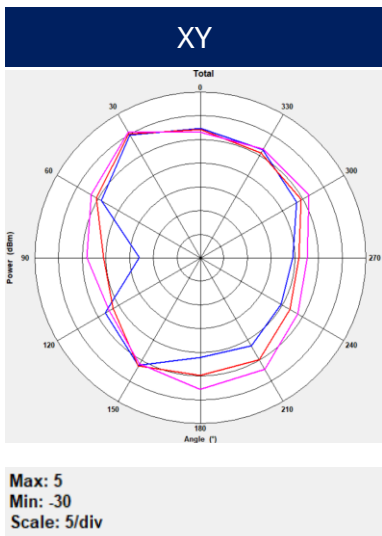
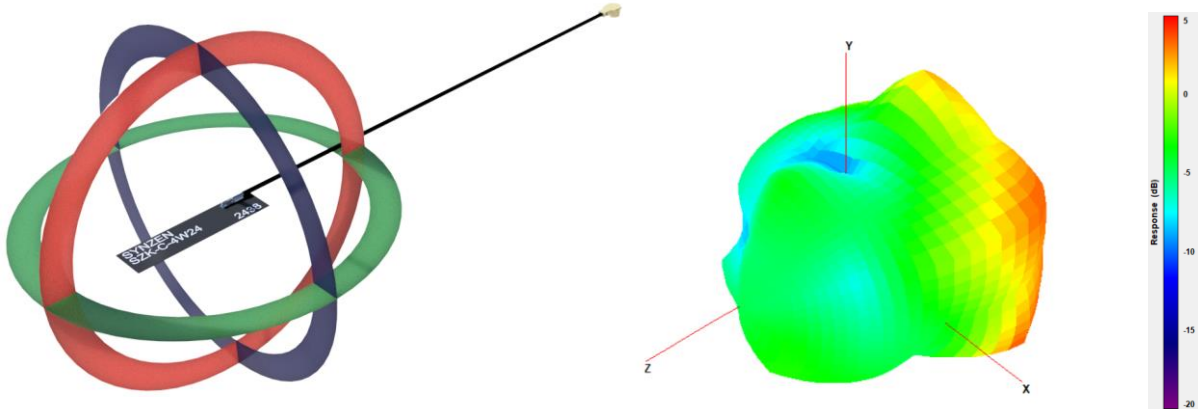


Average Gain

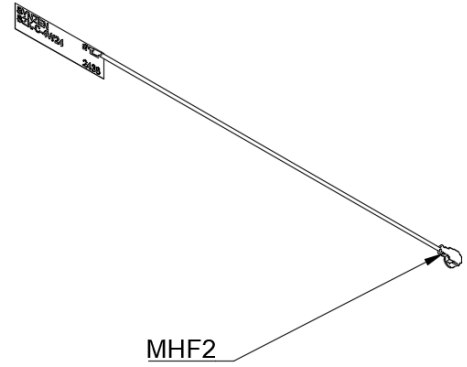
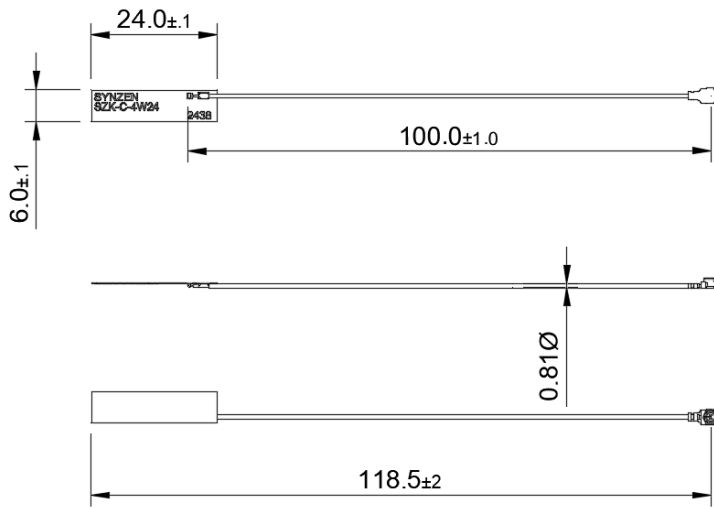


RF Radiation Patterns

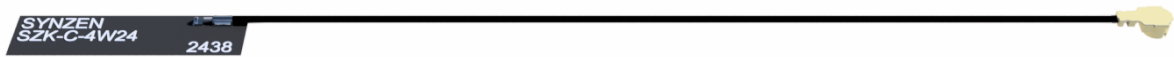
RF Radiation Patterns at 2450MHz



Mechanical Drawing



ALL DIMENSIONS IN MM



Packaging

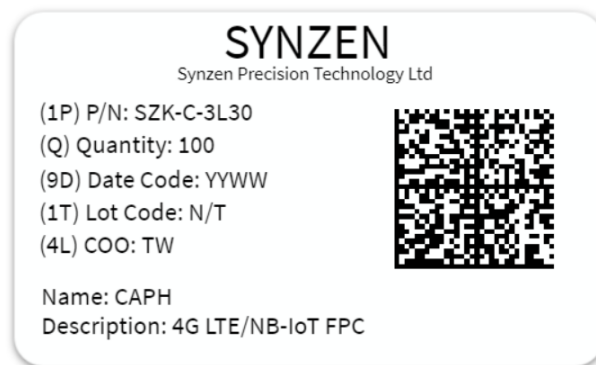
Antennas packed in PE bag (20 per bag)

Small bag dimensions: 28.5 x 9.5 (cm)

100pcs per larger PE bag with product label

Bag dimensions = 30 x 19 (cm)

Label



Material Regulation

The antenna has been assessed to conform to RoHS requirements. A certificate of conformance is available upon request.

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